

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/735,319	12/12/2003	Mervin G. Wood	11/2-22819/A/CGC 2136	2212	
324	7590 07/12/2005		EXAMINER		
CIBA SPECIALTY CHEMICALS CORPORATION			KLEMANSKI, HELENE G		
PATENT DEP			ART UNIT	PAPER NUMBER	
P O BOX 2005	5		1755		
TARRYTOWN, NY 10591-9005			DATE MAILED: 07/12/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	Ţ					
Office Action Summary		10/735,319	WOOD ET AL.						
		Examiner	Art Unit						
		Helene Klemanski	1755	· ·					
Period f	The MAILING DATE of this communication ap or Reply	pears on the cover sheet w	vith the correspondence addres	S					
	IORTENED STATUTORY PERIOD FOR REPL	Y IS SET TO EXPIRE 3 N	MONTH(S) FROM	7					
THE - External control	MAILING DATE OF THIS COMMUNICATION. ensions of time may be available under the provisions of 37 CFR 1.7 r SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period ure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing period patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a ly within the statutory minimum of th will apply and will expire SIX (6) MO e, cause the application to become A	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this commu BANDONED (35 U.S.C. § 133).	nication.					
Status									
1)🖂	Responsive to communication(s) filed on 21 A	April 2005.		·					
2a)□	<u> </u>	s action is non-final.							
3)									
Disposit	tion of Claims								
4)🖂	Claim(s) 1 and 10-22 is/are pending in the app	plication.							
4a) Of the above claim(s) is/are withdrawn from consideration.									
5)□	_								
6)⊠									
7)	Claim(s) is/are objected to.								
8)□	Claim(s) are subject to restriction and/o	or election requirement.	•						
Applicat	tion Papers								
9)□	The specification is objected to by the Examine	er.							
-10)□	The drawing(s) filed on is/are: a)☐ acc	cepted or b) objected to	by the Examiner.						
	Applicant may not request that any objection to the	drawing(s) be held in abeya	ance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correct	ction is required if the drawin	g(s) is objected to. See 37 CFR 1	.121(d).					
11)	The oath or declaration is objected to by the E	xaminer. Note the attache	ed Office Action or form PTO-1	52.					
Priority	under 35 U.S.C. § 119								
•	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document	ts have been received.							
	2. Certified copies of the priority documen			20					
	3. Copies of the certified copies of the price application from the International Burea		n received in this National Sta	Je					
*	See the attached detailed Office action for a list	•	at received.						
	See the attached detailed Office action for a list	to, the continue copies no							
Attachme	nt(s)								
1) 🔲 Noti	ice of References Cited (PTO-892)		Summary (PTO-413)						
	ce of Draftsperson's Patent Drawing Review (PTO-948)		o(s)/Mail Date Informal Patent Application (PTO-152))					
	rmation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 er No(s)/Mail Date <u>4/21/05</u> .	6) Other:	——·	•)					

Application/Control Number: 10/735,319 Page 2

Art Unit: 1755

DETAILED ACTION

Response to Amendment

- 1. Claims 1, 10-16 and 20-22 have been amended, claims 2-9 have been cancelled and no new claims have been added. Hence, claims 1 and 10-22 are pending in the application.
- 2. The provisional obviousness-type double patenting rejections to the claims as set forth in the previous Office Action dated January 25, 2005 have been overcome by applicant's amendments and are now withdrawn. The examiner acknowledges that applicants are willing to file a terminal disclaimer over co-pending application No. 10/762,077 to overcome the provisional obviousness-type double patenting rejection however, it is the examiner's position that this is not necessary since applicants have amended their claims. The present claims as now amended only read on dialkyl N-hydroxylamine salts whereas the amended claims of 10/762,077 no longer include dialkyl N-hydroxylamine salts.
 - 3. The 102(b) rejections to the claims over WO02/055618 and Seltzer et al. ('724) as set forth in the previous Office Action dated January 25, 2005 have been overcome by applicant's amendments and are now withdrawn.
- 4. The 102(e) rejection to the claims over Biry as set forth in the previous Office Action dated January 25, 2005 have been overcome by applicant's amendments and are now withdrawn.

Art Unit: 1755

5. The 103(a) rejections to the claims over Helling et al. and Seltzer et al. ('724) as set forth in the previous Office Action dated January 25, 2005 have been overcome by applicant's amendments and are now withdrawn.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 1, 10-14 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Seltzer et al. (US 2002/0088574).

Seltzer et al. (US 2002/0088574) teach a composition having reduced loss of brightness and enhanced resistance to yellowing which comprises pulp or paper which still contains lignin and 0.001-5% by weight based on the pulp or paper of an N,N-dialkylhydroxylamine acid salt of the formula

 $(R_1R_2NH-OH)_h^+(X^-)_i$

wherein R_1 and R_2 are independently C_{1-18} alkyl, C_{1-18} alkyl substituted by a hydroxyl group; X is an inorganic or organic anion such as phosphate, phosphonate, carbonate, bicarbonate, nitrate, chloride, bromide, bisulfite, sulfite, bisulfate, sulfate, borate, formate, acetate, benzoate, citrate, etc. and the total charge of cations h is equal to the total charge of anions j. The composition may further comprise UV absorbers such as benzotriazoles, s-triazines, benzophenones, α -cyanoacrylates, oxanilides,

Art Unit: 1755

benzoxazinones, benzoates and α-alkyl cinnamates. It is preferable that the paper or pulp is chemimechanical or thermomechanical pulps or papers (i.e. recording mediums). See paras. 0019-0059, paras. 0100-0104, paras. 0106-0110, examples 1, 3, 4 and 8-10 and claims 1-11, 35-37 and 41-43. The composition as taught by Seltzer et al. (US 2002/0088574) appears to anticipate the present claims.

8. Claims 1, 10-14 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Seltzer et al. (US 2002/0174964).

Seltzer et al. (US 2002/0174964) teach a composition having reduced loss of brightness and enhanced resistance to yellowing which comprises pulp or paper which still contains lignin and 0.001-5% by weight based on the pulp or paper of an N,N-dialkylhydroxylamine acid salt of the formula

 $(R_1R_2NH-OH)_h^+(X^-)_j$

wherein R_1 and R_2 are independently C_{1-18} alkyl, C_{1-18} alkyl substituted by a hydroxyl group; X is an inorganic or organic anion such as phosphate, phosphonate, carbonate, bicarbonate, nitrate, chloride, bromide, bisulfite, sulfite, bisulfate, sulfate, borate, formate, acetate, benzoate, citrate, etc. and the total charge of cations h is equal to the total charge of anions j. The composition may further comprise UV absorbers such as benzotriazoles, s-triazines, benzophenones, α -cyanoacrylates, oxaniludes, benzoxazinones, benzoates and α -alkyl cinnamates. It is preferable that the paper or pulp is chemimechanical or thermomechanical pulps or papers (i.e. recording mediums). See paras. 0017-0059, paras. 0100-0104, paras. 0106-0110, examples 1, 3,

Art Unit: 1755

4 and 8-10 and claims 1-11, 35-37 and 41-43. The composition as taught by Seltzer et al. (US 2002/0174964) appears to anticipate the present claims.

9. Claims 1, 10-14 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Seltzer et al. ('326).

Seltzer et al. ('326) teach a composition having reduced loss of brightness and enhanced resistance to yellowing which comprises pulp or paper which still contains lignin and 0.001-5% by weight based on the pulp or paper of an N,N-dialkylhydroxylamine acid salt of the formula

 $(R_1R_2NH-OH)_h^{\dagger}(X^{-})_j$

wherein R_1 and R_2 are independently C_{1-18} alkyl, C_{1-18} alkyl substituted by a hydroxyl group; X is an inorganic or organic anion such as phosphate, phosphonate, carbonate, bicarbonate, nitrate, chloride, bromide, bisulfite, sulfite, bisulfate, sulfate, borate, formate, acetate, benzoate, citrate, etc. and the total charge of cations h is equal to the total charge of anions j. The composition may further comprise UV absorbers such as benzotriazoles, s-triazines, benzophenones, α -cyanoacrylates, oxanilides, benzoxazinones, benzoates and α -alkyl cinnamates. It is preferable that the paper or pulp is chemimechanical or thermomechanical pulps or papers (i.e. recording mediums). See col. 3, line 20 – col. 5, line 12, col. 7, line 50 – col. 8, line 5, examples 1, 3, 4 and 8-11 and claims 1-11, 35-37 and 41-43. The composition as taught by Seltzer et al. ('326) appears to anticipate the present claims.

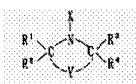
Application/Control Number: 10/735,319

Art Unit: 1755

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 1, 10, 11, 15, 16 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oki et al. ('597).

Oki et al. ('597) teach an ink-jet ink and/or an ink-jet recording medium containing a receiving layer comprising a compound of the formula



wherein Y is a group of nonmetal atoms necessary to complete a five- to seven-membered ring; X is an oxy radical, alkoxy group, aryloxy group or hydroxy group; R¹, R², R³ and R⁴ are independently H or alkyl with the proviso that any two of R¹ to R⁴ and Y may be connected to each other to form a 5- to 7-membered ring and wherein the compound has an anionic water-soluble group such as –SO₃H, -P(O)(OH)(OR), -P(O)(OR)₂, carboxyl groups or salts thereof wherein R is an alkyl or aryl group. The recording liquid contains the hindered amine compound in an amount of 0.05-10 wt% and the recording medium contains the compound in an amount of 0.01-10 wt% in relation to the total weight of the receiving layer. The ink receiving layer may further contain UV absorbing agents. See col. 2, lines 18-25 and 42-47, col. 3, lines 4-11 and

Application/Control Number: 10/735,319

Art Unit: 1755

27-31, col. 5, lines 9-45, col. 5, line 67 – col. 6, line 3, col. 6, lines 18-20, compounds (1-1) and (1-3)-(1-10), col. 8, lines 14-15, col. 12, lines 36-49, col. 13, lines 58-62, Table 1; Ink Compositions 1,2, 6 and 7, col. 15, lines 38-43, Table 2, col. 17, lines 15-17 and 48-49, Table 3; Recording mediums a and b, Table 4 and claims 1, 2, 4-6, 10, 11 and 14-21. Oki et al. ('597) fails to specifically exemplify the use of a compound wherein at least one of R¹, R², R³ and R⁴ is H.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific compound wherein at least one of R¹, R², R³ and R⁴ is H as claimed by applicants as Oki et al. ('597) also discloses the use of these compounds but fails to show an example incorporating them.

12. Claims 1, 10, 11, 15, 16 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura et al. (US 2003/0070582).

Kitamura et al. (US 2003/0070582) teach an ink-jet ink and/or an ink-jet recording medium containing a receiving layer comprising a compound of the formula

wherein Y is a group of nonmetal atoms necessary to complete a five- to sevenmembered ring; X is an oxy radical, alkoxy group, aryloxy group or hydroxy group; R^1 , R^2 , R^3 and R^4 are independently H or alkyl with the proviso that any two of R^1 to R^4 and Y may be connected to each other to form a 5- to 7-membered ring and wherein the compound has an anionic water-soluble group such as $-SO_3H$, -P(O)(OH)(OR), $-P(O)(OR)_2$, carboxyl groups or salts thereof wherein R is an alkyl or aryl group. The Application/Control Number: 10/735,319

Art Unit: 1755

recording liquid contains the hindered amine compound in an amount of at least 0.05-10 wt% and the recording medium contains the compound in an amount of at least 0.01-10 wt% in relation to the total weight of the receiving layer. The ink receiving layer may further contain UV absorbing agents. See paras. 0012-0014, paras. 0017-0022, para. 0033, paras. 0064-0067, compounds (1-1) to (1-7), paras. 0074-0075, paras. 0115-0117, para. 0125, para. 0129, Table 1, Table 3, Tables 5 and 6 and claims 1-5, 7 and 8. Kitamura et al. (US 2003/0070582) fails to specifically exemplify the use of a compound wherein at least one of R¹, R², R³ and R⁴ is H.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific compound wherein at least one of R¹, R², R³ and R⁴ is H as claimed by applicants as Kitamura et al. (US 2003/0070582) also discloses the use of these compounds but fails to show an example incorporating them.

13. Claims 1, 15, 17, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oki et al. ('735).

Oki et al. ('735) teach an aqueous ink composition comprising a colorant, a water-soluble organic solvent and an amine compound of the formula

$$R^1 > C \xrightarrow{X} C \xleftarrow{R^9}$$

wherein Y is a group of nonmetal atoms necessary to complete a five- to sevenmembered ring; X is an oxy radical, alkoxy group, aryloxy group or hydroxy group; R^1 , R^2 , R^3 and R^4 are independently H or alkyl with the proviso that any two of R^1 to R^4 and Y may be connected to each other to form a 5- to 7-membered ring and wherein the Application/Control Number: 10/735,319 Page 9

Art Unit: 1755

compound has an anionic water-soluble group such as $-SO_3H$, -P(O)(OH)(OR), $-P(O)(OR)_2$, carboxyl groups or salts thereof wherein R is an alkyl or aryl group. The compound stops the progress of photo-oxidation reaction of colorants to inhibit photo-deterioration thereof and is therefore considered a light stabilizer. The recording liquid contains the hindered amine compound in an amount of 0.01-5 wt%. The recording liquid may further comprise an UV absorber such as a benzophenone or cyano acrylate based compound. See col. 4, lines 20-45, col. 5, lines 2-4 and 52-54, col. 6, lines 40-54, col. 7, lines 7-54, col. 9, lines 13-45, col. 11, lines 24-25, compounds 1-18, 23-26 and 33, Table 1; Examples A1-A5, col. 29, lines 56-57, col. 31, lines 40-43, examples B1-B3, col. 33, lines 10-11, Table 4; Examples C1 and C3, Table 7; examples D1-D5 and D7 and claims 1-5, 9-11 and 15-19. Oki et al. ('735) fails to specifically exemplify the use of a compound wherein at least one of R¹, R², R³ and R⁴ is H.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific compound wherein at least one of R¹, R², R³ and R⁴ is H as claimed by applicants as Oki et al. ('735) also discloses the use of these compounds but fails to show an example incorporating them.

Response to Arguments

14. Applicant's arguments with respect to claims 1 and 10-22 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free)

Helene Klerhanski Primary Examiner

Art Unit 1755

HK July 11, 2005